

Key success factors of a long lasting industrial flooring solution

INDUSTRIAL
FLOORING
SOLUTIONS

Subfloor preparation

The essential factor in successful execution lies in obtaining **good adhesion** of the floor system onto an **appropriate subfloor**. A further key factor is the treatment of the substrate by a **specific primer** product prior to the application of the overlay.

GOOD ADHESION

No flaking/contaminations

- ✓ removal of laitance & contamination (by grinding/miling/shot blasting/etc)

Clean (to avoid separation layer)

- ✓ sweeping/vacuuming

APPROPRIATE SUBFLOOR

Crack free

- ✓ initial shrinkage completed and humidity level approached equilibrium
- ✓ Force fitted repair of cracks (with resin)

Firm/load bearing

- ✓ >1,5 N mm² tensile strength

PRIMERS

- ✓ improve adhesion
- ✓ repair and seal the subfloor at a micro level
- ✓ consolidate and reinforce the subfloor
- ✓ prevent fluids present in the substrate from effecting the coating
- ✓ seal substrate porosity
- ✓ improve ease of application by preventing absorption of resin



ARDEX offers you a full range of products for subfloor preparation and supports you during the design and application stages.

- Specified System Solutions
- Technical Support and Training
- Global Service Network



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FURTHER PREPARATION MEASURES TO BE CONSIDERED:

- in case of repairing a weak substrate requires too intensive efforts, a new built screed would be an option
- In case of unevenness: apply a thin, suitable levelling layer to achieve evenness requirements
- The correct design and execution of joints (expansion, construction, ...) is essential for the floor`s functionality

Moisture control option: suppress excessive moisture vapor emissions in new or existing concrete

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Wearing surface selection

Choosing the right wearing layer within an industrial facility ensures that the site can maintain a safe, hygienic and efficient operational environment. The surest way to avoid floor failure is to take the necessary steps at material specification stage to prevent problems from occurring in the first place.

Functional requirements for the floor surface and resilience of the material itself is often underestimated. Understanding the reasons of triggers that can lead to floor failure helps to prevent such instances from ever occurring due to the selection of the most suitable **wearing surface system** and **product technology**.

EVALUATING FUNCTIONAL REQUIREMENTS

Mechanical stress

static and dynamic loads; abrasion

Safety

anti-slip, conductivity, fire resistance, non VOC

Chemical stress

acids/alkalis/solvents, oils, cleaning agents

Aesthetic/Surface appearance

flatness, texture/finish, design/color

Temperature

heat, freeze; thermal shock

Comfort and Care

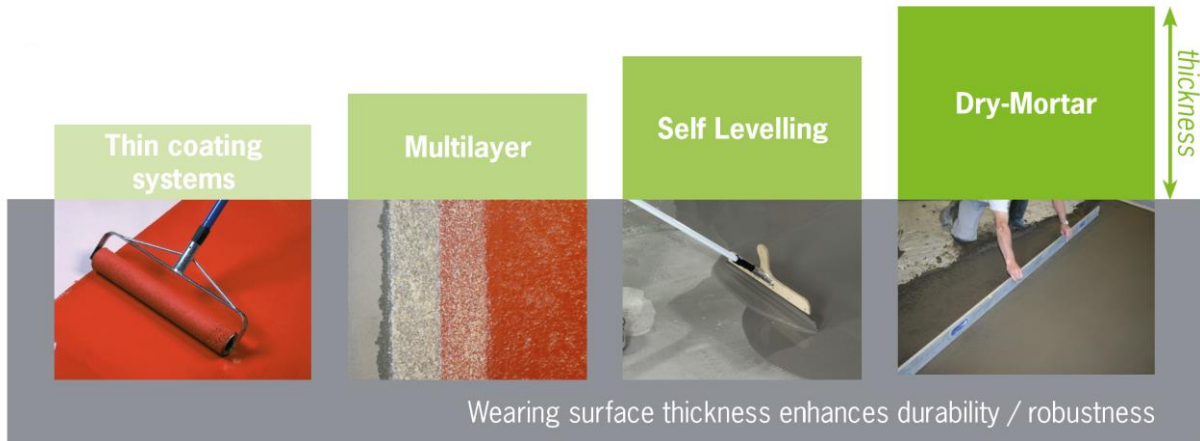
ease of cleaning, hygiene/antimicrobial, fast install and repair



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INDUSTRIAL FLOORING SOLUTIONS

WEARING SURFACE – SYSTEM PORTFOLIO



PRODUCT TECHNOLOGY PORTFOLIO

ARDEX provides systems in a wide range of colors depending on individual project requirements

	Epoxy	Polyurethane	PU-Cement	Cement system	Industrial Tiling Full System layup
Impact resistance	good	very good	excellent	fair	depending on tile
Flexibility	low	excellent	low	low	depending on type of grout and joints
Temperature resistance	moderate (~55°C)	moderate (~55°C)	excellent (~120°C)	excellent (~120°C)	epoxy grout: moderate (-55°C)
Acids	good	very good	excellent	bad	epoxy grout: good
Alkalis	very good	good	excellent	very good	epoxy grout: very good
Solvents	good	low	very good	excellent	epoxy grout: good
Specialist applications	MMA	Acrylics	Polyurea	Polyaspartic	

ARDEX teams of professionals are available for discussion to determine the most suitable combination of wearing surface system and product technology according your functional requirements.

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System application & maintenance

Qualified **application** partners ensure the proper **installation** of an industrial flooring system. They are experienced to secure a proper substrate, the right tools and logistics on site to properly work with and apply our products.

SECURE PROPER APPLICATION / INSTALLATION ON SITE

- ✓ through network of qualified system partners
- ✓ efficient building site logistics to minimize down time
- ✓ application of floor's initial surface treatment / protection

MAINTENANCE INSTRUCTIONS

Regular cleaning of the surface with a rotary scrubbing machine in conjunction with a water miscible cleaning agent, hot water washing at temperatures up to 50°C or even steam cleaning needs to be considered during the material specification stage.

Floorings benefit from a suitable and consistent cleaning and maintenance regime. This should already be agreed in advance and is determined by several factors, predominantly:

- ✓ Type and frequency of traffic
- ✓ Degree and type of soiling
- ✓ Specific hygiene requirements

ARDEX teams of professionals support you during application and maintenance stages